

REMARKS

At the time of the Office Action, claims 41–47, 49–53, and 55–60 were pending. In the Office Action:

- claims **41, 46, 47, 49, 55, and 60** were rejected under 35 U.S.C. § 103(a) as being unpatentable over **Nishigaki** (hereinafter Nishigaki), Japanese Patent Application JP 11-196297, in view of **Sciammarella**, et al. (hereinafter Sciammarella), U.S. Patent No. 7,051,291 and further in view of **Frank**, et al. (hereinafter Frank), U.S. Patent No. 6,384,840;
- claims **42, 43, 50, 51, 56, and 57** were rejected under 35 U.S.C. 103(a) as being unpatentable over **Nishigaki** and **Sciammarella**, in view of **Frank**, and further in view of **Miyao** (hereinafter Miyao), U.S. Patent No. 6,466,237;
- claims **44, 52, 53, and 58** were rejected under 35 U.S.C. 103(a) as being unpatentable over **Nishigaki** and **Sciammarella**, in view of **Frank** and further in view of **Horvitz**, et al. (hereinafter Horvitz), U.S. Patent No. 5,880,733; and
- claims **45 and 59** were rejected under 35 U.S.C. 103(a) as being unpatentable over **Nishigaki** and **Sciammarella**, in view of **Frank** and further in view of **Kobayashi**, et al. (hereinafter Kobayashi), Japanese Patent Document No. 2001-067163 A.

Applicant thanks the Examiner for making the present office action non-final and permitting a further response.

Applicant addresses the Examiner's Response to Arguments section in this response, but maintains the relevant positions provided in the prior response, which are repeated below the Reply section.

Reply to the Examiner's Response to Arguments

In the Office Action, on p. 4, the Examiner indicated that Sciammarella, while not going into details of applying the concepts of the invention as a particular mode for those who are vision impaired (noting that Sciammarella is concerned about a different problem),

...still teaches the concept of setting a particular layout format so that when a particular icon or image is selected, the image would be superimposed to a second image and enlarged such that a second icon from the group of icons in a display area is concealed by the elected image or icon. The fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

Applicant does not disagree with the Examiner's characterization of the teaching of Sciammarella with respect to Sciammarella teaching a selected second thumbnail that is enlarged and covers other thumbnails when it is enlarged.

Furthermore, Applicant would not disagree with the Examiner about recognizing an additional advantage were the teaching of Sciammarella more on point to addressing issues related to the vision impaired and the motivation to combine this reference with Nishigaki present. However, Applicant respectfully disagrees with the Examiner given the lack of teaching of Sciammarella and the lack of a motivation to combine.

Claim 41 requires: 1) determining whether an impaired vision modes is set; and 2) that a magnified view of the first indicium be provided if the impaired vision mode is set.

On p. 5 of the Office Action, the Examiner cited Sciammarella's teaching at 3:62 – 4:1 related to the selection of various thumbnail layouts. The Examiner then stated:

This section of Sciammarella clearly teaches that the user can selected between the plurality of presentation layout formats.

Applicant notes, however, that the layout formats that can be selected in Sciammarella only relate to different ways that thumbnails can be displayed, and not as to whether an enlarged or magnified view is to be presented. The mere selection between different thumbnail layouts, while relevant to the aims of Sciammarella (managing and organizing a large number of data objects in a manner that a user can easily and quickly understand (1:38–49)), is of no relevance whatsoever to a person who is visually impaired, since the problem of not being able to view reduced size objects well is present regardless of the ordering, organization, or layout of the icons.

The Examiner further stated that depending on the selected layout format, the selected icon or image would be enlarged. The Examiner stated, on pp. 5–6:

In a case of having a layout format such as the layouts shown in figs. 1 and 2, the image would not be enlarged when selected, however if the layout as shown in fig. 19 is set, the selected image would be enlarged. This teaches that if the layout as shown in fig. 19 is set (which the Examiner is interpreting as the impaired vision mode), since the system would recognize said set layout format, the selected icon or image would be superimposed on other images or icons and would also magnify the selected icon or image such that a second image or icon is concealed in its entirety (See fig. 19) in accordance with the set layout format. The Examiner understand[s] that this teaching reads on the limitations of “*if selection of the first indicium by a user is detected, determining whether an impaired vision mode is set; if an impaired vision mode is determined to be set, performing steps of: superimposing the first indicium on the second indicium; magnifying the first indicium to conceal an entirety of the second indicium*” as claimed.

Applicant respectfully disagrees with this characterization of the teaching of Sciammarella. First, the ability to provide an enlarged view in Sciammarella does not appear to be a separate display mode. Fig. 19 illustrates an enlarged view of a thumbnail image based on a user selection of the thumbnail (9:65 – 10:12). However, no distinction is made in Sciammarella as to the underlying thumbnail layout, and, contrary to the Examiner’s observation, the basic thumbnail layout upon which Fig. 19 is based appears to be that of Fig. 2, with the thumbnails on the screen in both instances being laid out in the form of an arc.

To the extent that the Examiner considers Fig. 19 to be a separate “mode” of display (“...if the layout as shown in fig. 19 is set (which the Examiner is interpreting as the impaired vision mode))” then this interpretation confuses the mode itself with the result of the mode, which is improper because it presumes the very feature that the disclosure is being cited for. As claimed, the enlarged view is a result of a mode being set. However, based on the Examiner’s reasoning, the enlarged view itself defines the mode. This is an improper interpretation of the claim language because it ignores an important interrelationship between the claimed elements. The claims focus on what triggers the enlarged display mode, and here, the Examiner has failed to show how the teaching of Sciammarella discloses one of the fundamental triggers for the enlarged display.

On p. 7 of the Office Action, the Examiner characterized the claimed language as simply having recognized another advantage that would flow naturally from following the suggestion of the prior art. However, Applicant reiterates that what is claimed is not a mere unrecognized

advantage of the teaching of the prior art. Claim 41 provides a triggering feature that is not taught by the combination of references, and thus is significantly more than a mere advantage as indicated by the Examiner.

With regard to the motivation to combine and the use of hindsight reasoning, the Examiner, on pp. 8–9, stated:

[A]lthough they [Nishigaki, Sciammarella, and Frank] do not teach using a mode indicated as “visual impaired mode”, the proposed combination by the Examiner still suggest[s] the concept of changing the appearance of display icons or images to operate a device based on a selected layout mode similar to the claimed invention in the present application. The fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. [cite omitted]

[I]n response to applicant’s argument that the examiner’s conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant’s disclosure, such a reconstruction is proper.

While Applicant does not disagree with the legal standard related to motivation to combine and hindsight described by the Examiner, Applicant respectfully disagrees with its application in the present case.

The present invention addresses the use of a camera by a visually impaired person. One of ordinary skill in the camera arts would not presume that one having impaired vision would even use a camera, for, they would reason, “how could a person who cannot see well hope to take good pictures?” Thus, this type of camera user has been ignored in the cited prior art—in other words, there is no recognition that the visually impaired might want to use a camera.

The present invention recognizes that even a person with a disability, particularly a severe one with respect to the field of photography such as being visually impaired, can still enjoy and use a camera, and the field of photography as a whole, particularly if given the right assistance.

The Examiner has combined art that includes displays connected to personal computers (Sciammarella, Frank). It is well known to provide visual assistance to those who are visually impaired on a personal computer, since the use of computers are essential to performing many job functions. However, the recognition that assistance to the visually impaired can be provided on a camera does not naturally flow from its use in the personal computer field, given the visual and recreational nature of the photographic arts. Thus, the Applicant maintains the position that impermissible hindsight has been applied in the present case, since the desirability of providing a check for whether a mode designed to assist the visually impaired has been gleaned only from the Applicant's disclosure in this case.

The relevant portions of Applicant's prior response are repeated below, with minor amendments.

35 U.S.C. §103(a) Obviousness of Claims 41, 46, 47, 49, 55, and 60 by Nishigaki in View of Sciammarella and Frank

1. The combination of Nishigaki, Sciammarella, and Frank fail to teach or suggest, alone or in combination, the element of a user settable visually impaired setting that permits magnification, as required by independent claims 41, 49, and 55.

In the Office Action, on pp. 10–14, the Examiner rejected independent claim 41 as being obvious over the combination of Nishigaki, Sciammarella, and Frank. The Examiner provided the Nishigaki reference as reading on the present claim 41 as follows:

Regarding claim 41, Nishigaki discloses a method for altering a digital camera display (Fig. 3: DSP) to facilitate viewability, the method comprising the steps of:

displaying indicia on a display screen of the digital camera (See figs. 1 and 2), the indicia including a first indicium and a second indicium (See a plurality of indicium as shown in figs. 1 and 2);

detecting selection of the first indicium by a user (See menu item selected as shown in fig. 1 a; see English Translation, page 4, ¶0012-0013; this teaches detecting selection of the first indicium as claimed); magnifying the first indicium (See magnified selected menu item as shown in fig. 1 a; see English Translation, page 4, ¶0012-0013; page 5, ¶0018 - page 6, ¶0019; page 8, ¶0026-0027).

The Examiner acknowledged that Nishigaki does not explicitly disclose that if selection of the first indicium by a user is detected, determining whether an impaired vision mode is set; if an impaired vision mode is determined to be set, performing steps of: superimposing the first indicium on the second indicium; magnifying the first indicium to conceal an entirety of the second indicium; and reducing an opacity of the first indicium so that the entirety of the second indicium is viewable through the first indicium.

However, the Examiner then applied Sciammarella as partially fulfilling the deficiency in the teaching of Nishigaki, stating:

However, Sciammarella et al. discloses a method for altering an electronic device display (See fig. 19), the method comprising the steps of: (a) displaying indicia on a display screen of the electronic device, the indicia including a plurality of indiciums (such as digital image files, digital audio files, text files, executable programs, program files, and movie files); (b) determining whether a user has selected a first indicium (See indicium representing image 173.JPG selected as shown in fig. 19); (c) determining whether an impaired vision mode is set (The examiner is reading the arrangement shown in fig. 19 as the impaired vision mode from the different types of display arrangements as shown in figs. 1-4, 15 and 17-19 that can be set by the user; Col. 3, line 15-col. 4, line 29); (d) if the impaired vision mode is set, magnifying the selected menu item (See indicium representing the image 173.JPG selected magnified in the center of the display area) (Col. 3, line 15-col. 4, line 29; col. 4, lines 30-50; col. 9, line 51 - col. 10, line 49).

Sciammarella et al. discloses [sic] further discloses that the data is displayed as a sequence, said sequence arrange such that a data object of interest is magnified so that the user can get a closer look, said data object being magnified to occupy a substantially entirety of the display area while the previously selected indicium returns to the smaller size characteristic of the unselected indiciums in the layout (See fig. 9; this teaches magnifying the first indicium to conceal an entirety of the second indicium since there will be other indiciums concealed by the selected indicium as shown in fig. 19) (Col. 3, lines 15-61; col. 4, lines 30-50; col. 9, line 51 - col. 10, line 49).

In concluding that the combination of Nishigaki and Sciammarella teach all but the reducing of an opacity of the first indicium so that the entirety of the second indicium is viewable through the first indicium (for which the Examiner later applied the Frank reference), the Examiner stated:

Therefore, taking the combined teaching of Nishigaki in view of Sciammarella et al. as a whole, one of an ordinary skill in the art at the time the invention was made would note the advantages of magnifying the data objects in the Sciammarella et al. so that a user can get a closer look of a particular data object and would find obvious to use the teaching of Sciammarella et al. to modify Nishigaki, to determine whether an impaired vision mode is set if selection of the first indicium by a user is detected; and if an impaired vision mode is determined to be set, performing the steps of: superimposing the first indicium on the second indicium; and magnifying the first indicium to conceal an entirety of the second indicium. The motivation to do so would have been to further improve the method for altering a digital camera display by allowing the user to get a closer look of a selected item of interest as suggested by Sciammarella et al. (Col. 9, line 51 - col. 10, line 49).

Applicant respectfully disagrees that this combination teaches the elements related to the setting of an impaired vision mode. The present invention recognizes the problem that users with impaired vision might have in operating a camera, particularly when the typical small screens are utilized to provide functionality selection.

The present invention provides a solution in which, when the camera is in the vision impaired mode via a setting, the indicia representing functionality selections are magnified so that the vision impaired user can more readily operate the device, whereas a normal functionality is provided when the camera setting is not in the vision impaired mode.

As noted in the MPEP §2143.03, all claim limitations must be considered in judging the patentability of that claim against the prior art. *In re Wilson*, 424 F.2d 1382 (CCPA 1970). In the present invention, the combination of Nishigaki, Sciammarella, and Frank fail to teach or suggest or even recognize the problem in dealing with the use of a camera by both normal and vision impaired individuals, and the solution to the problem found in the present invention.

With regard to a finding of a vision impaired mode in the prior art, the Examiner stated, referencing Sciammarella:

(c) determining whether an impaired vision mode is set (The examiner is reading the arrangement shown in fig. 19 as the impaired vision mode from the different types of display arrangements as shown in figs. 1-4, 15 and 17-19 that can be set by the user; Col. 3, line 15-col. 4, line 29); (d) if the impaired vision mode is set, magnifying the selected menu item

(See indicium representing the image 173.JPG selected magnified in the center of the display area) (Col. 3, line 15-col. 4, line 29; col. 4, lines 30-50; col. 9, line 51 - col. 10, line 49).

First, there is nothing in this disclosure that suggests any form of a conditional setting relating to the enlargement option. The arrangements for images that can be set by the user have nothing to do with the display of an enlarged image, but rather deal with the efficient presentation of a large number of data objects. This is consistent with Sciammarella's disclosure in the background section at 1:37-41:

However, conventional techniques, such as windows, folders, and lists, have a problem in that they are insufficient for presenting such large numbers of data objects in a manner that a user can easily and quickly understand.

The various presentations disclosed are: 1) line layout (Fig. 1); 2) circle layout (Fig. 2); 3) grid layout (Fig. 3); and 4) helix layout (Fig. 4). Sciammarella is actually silent or at least very nebulous as to how the particular layout is determined and so it is not clear that the different presentations can be set by the user (contrary to the Examiner's assertion). However, even if *arguendo* the presentation format is selected by the user, this has nothing to do with the magnification option. In Sciammarella, the magnification takes place regardless of any selection of the presentation layout format. The magnification always takes place and would thus not serve to accommodate in any particular way both a view with and a viewer without a visual impairment.

Figure 19 of Sciammarella does show a magnified look at an image thumbnail, but this particular display in no way serves to delineate between those who are vision impaired and those who are not—the ability to have a camera that is useful to operate both by one with no visual impairment as well as one with visual impairment is a very important aspect of the present invention that the Examiner has presumed into the combination.

Furthermore, Sciammarella deals with a full-screen monitor on a computer, and the enlargement relates to a content element (a picture) that is to be operated on, not a control element that is used to control the device. On a computer, there are numerous other mechanisms that can be, and are actually preferably, used by a visually impaired individual to control the device itself (e.g., the use of high contrast color schemes, etc.). The present invention recognizes a distinct solution that is well-suited for use in a camera device for the visually impaired that is not recognized in the combination of references.

The Examiner states that as a motivation to combine Nishigaki and Sciammarella would be to further improve the method for altering a digital camera display by allowing the user to get a closer look of a selected item of interest as suggested by Sciammarella, but neither of the references teach or suggest addressing the issue of visual impairment, nor do they even suggest a user-configurable parameter that is used to determine whether such zooming action is to take place, making the camera operation useful to both the visually impaired and non-visually impaired individuals.

Sciammarella, alone or in combination with Nishigaki and Frank, fails not only to disclose a user-based selection of an impaired vision mode, but even fails to disclose any form of a user-selected criteria that dictates whether an enlarged image will be shown at all. In the present case, the Examiner is clearly using impermissible hindsight by turning to the Applicant's own teaching in the specification regarding the image impaired mode being used in the camera to conclude that it would be obvious to combine these references and arrive at the present invention, despite any lack of teaching about a vision impaired mode and despite any lack of teaching about a user-selected option for determining whether or not to magnify the image or not.

Dependent claims 45–47 and 59–60 are nonobvious in view of the above arguments and by virtue of their dependence from independent claims 41 and 55.

For these reasons, Applicant respectfully requests that the Examiner withdraw this 35 U.S.C. 103 rejection from the application.

35 U.S.C. §103(a) Obviousness of Claims 42–44, 50–53, and 56–58 over some combination of Nishigaki, Sciammarella, Frank, Miyao, Horvitz, and Kobayashi.

2. *Applicant relies upon the above arguments with respect to the remaining dependent claims, and asserts that none of the additional references supplants the deficiencies identified above with respect to the combination of Nishigaki, Sciammarella, and Frank.*

In the Office Action, on pp. 15–19, the Examiner combined Nishigaki, Sciammarella, and Frank with Miyao, Horvitz, and Kobayashi in establishing an obviating combination of references for various dependent claims in the present application. Without addressing the specifics of the additional references on the merits, Applicant relies upon the above arguments

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and asserts that the disclosures of each of these additional references, alone or in combination, does not serve to solve the deficiencies of the combination of the Nishigaki, Sciammarella, and Frank references. The Examiner has cited these references for purposes related to the specifics of the dependent claims.

For these reasons, the Applicant asserts that the claim language clearly distinguishes over the prior art, and respectfully request that the Examiner withdraw these 35 U.S.C. §103 rejections from the present application.

Conclusion

The application is considered in good and proper form for allowance, and the Examiner is respectfully requested to pass this application to issue. If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned attorney.

Respectfully submitted,

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